

Claims

1. In combination with a mowing implement including a rotary disc cutter bar extending transversely to a direction of travel during mowing operation and including transversely spaced, knife-carrying rotary discs, structure aiding in converging cut crop toward a discharge zone located behind the cutter, comprising: at least one converging drum mounted having an upright axis of rotation located behind a line of centers of said cutter bar and being located upstream relative to crop movement toward said discharge zone and adjacent at least one of said rotary discs; and said at least one converging drum having a lower end including an outer peripheral edge located a first distance above a path followed by knife blades carried by said at least one of said rotary discs and including an inner region surrounding said upright axis and located a second distance, which is greater than said first distance, above said path, thereby creating a relief area beneath said at least one converging drum.

2. The combination, as defined in claim 1, wherein said lower end of said at least one converging drum includes a top surface which is inclined upwardly and inwardly toward said upright axis of rotation of the converging drum, whereby crop engaging said lower end is lifted.

3. The combination, as defined in claim 1, wherein said structure aiding in converging cut crop includes a flat ejector plate mounted to a top of, and for rotation with, said at least one rotary disc; and said flat ejector plate being dimensioned so as to sweep a path beneath said at least one converging drum.

4. The combination, as defined in claim 1, wherein said at least one of said rotary discs is an end rotary disc.

5. The combination, as defined in claim 4, wherein said structure aiding in converging cut crop further includes a second converging drum mounted to a top of, and for rotation with, said end rotary disc.

6. The combination, as defined in claim 3, wherein said at least one converging drum is located adjacent to a second rotary disc; and a second flat ejector plate being mounted to a top of, and for rotation with said second rotary disc; and said second flat ejector plate being dimensioned for sweeping a path beneath

sat at least one converging drum.

7. The combination, as defined in claim 1, wherein said lower end of said at least one converging drum is in the shape of an inverted bowl.

8. The combination, as defined in claim 2, wherein said surface of said at least one converging drum is conical.

9. The combination, as defined in claim 1, wherein said structure aiding in the delivery of crop includes at least a second converging drum, identical to said at least one converging drum, mounted for rotation about a second upright axis located behind and downstream from said upright axis of rotation of said at least one converging drum.

10. The combination, as defined in claim 1, wherein said structure aiding in the delivery of crop includes a guide element defining a horizontal shelf located adjacent said at least one converging drum for receiving crop delivered by said at least one converging drum; and said shelf extending downstream from said at least one converging drum.

11. The combination, as defined in claim 10, wherein said mowing implement includes a conditioner arrangement located just rearward of said discharge zone; and said guide element further including a leg joined to, and extending down and inwardly from, a back of, said shelf to a location in front of said conditioner arrangement.

12. The combination, as defined in claim 11, wherein said leg of said guide element has an inner edge which slopes outwardly to the rear so as to induce crop material to hairpin on said edge in a location where it is stripped off by said conditioner arrangement.

13. The combination, as defined in claim 10, wherein said guide element further includes a stripper plate located directly above said shelf and having an edge located adjacent a path swept by said at least one converging drum.

14. In combination with a mowing implement including a rotary disc cutter bar extending transversely to a direction of travel during mowing operation and including transversely spaced, knife-carrying rotary discs, structure aiding in converging cut crop toward a discharge zone located behind the cutter, comprising:

at least one converging drum mounted having an upright axis of rotation located behind a line of centers of said cutter bar and being located upstream relative to crop movement toward said discharge zone and adjacent at least one of said rotary discs; and said at least one converging drum having a lower end including an upper surface inclined upwardly toward said upright axis.

15. The combination, as defined in claim 14, wherein said structure aiding in converging cut crop includes a flat ejector plate mounted to a top of, and for rotation with, said at least one rotary disc; and said flat ejector plate being dimensioned so as to sweep a path beneath said at least one converging drum.

16. The combination, as defined in claim 15, wherein said at least one converging drum is located adjacent to a second rotary disc; and a second flat ejector plate being mounted to a top of, and for rotation with said second rotary disc; and said second flat ejector plate being dimensioned for sweeping a path beneath said at least one converging drum.

17. The combination, as defined in claim 14, wherein said structure aiding in the delivery of crop includes a guide element defining a horizontal shelf located adjacent said upper surface of said lower end of, and extending downstream from, said at least one converging drum for guiding crop elevated by said upper surface of said at least one converging drum.

18. The combination, as defined in claim 17, wherein said guide element further includes a stripper plate located directly above said shelf and having an edge located adjacent a path swept by said at least one converging drum.

19. The combination, as defined in claim 17, wherein said mowing implement includes a conditioner arrangement located just rearward of said discharge zone; and said guide element further including a leg joined to, and extending down and inwardly from, a back of, said shelf to a location in front of said conditioner arrangement.

20. The combination, as defined in claim 19, wherein said leg of said guide element has an inner edge which slopes outwardly to the rear so as to induce crop material to hairpin on said edge in a location where it is stripped off by said conditioner arrangement.